

WHAT IS CLAIMED IS:

1. An electret condenser microphone comprising a tubular case having one end provided with a bottom portion to be used as a front faceplate and the other end opened;

5 a diaphragm and a back electrode plate being successively inserted into said case from said opened end, said diaphragm and said back electrode being disposed with a predetermined gap therebetween within said case;

10 said electret condenser microphone further comprising an insulating bushing press-fitted into said case from said opened end so as to abut against a surface of said back electrode plate facing said opened end of said case;

15 wherein when a predetermined force is applied to said insulating bushing from said opened end of said case, said insulating bushing is deformed so as to fit between an inner peripheral face of said case and an end portion of said back electrode plate.

20 2. An electret condenser microphone according to claim 1, wherein said diaphragm and said back electrode plate are disposed with said predetermined gap therebetween by way of a spacer; and

25 wherein said predetermined force applied to said insulating bushing from said opened end of said case is set to a value at which said insulating bushing deforms such that a part fitted between said inner peripheral face of said case and said end portion of said back electrode plate

abuts against said spacer.

3. An electret condenser microphone according to claim 1, further comprising a printed circuit board mounted with an impedance converter for converting a change in electrostatic capacity between said diaphragm and said back electrode plate into an electric impedance, and a fixing ring disposed to said opened end of said case than said printed circuit board;

wherein said printed circuit board and said fixing ring are inserted into said case from said opened end in a state where said insulating bushing is press-fitted into said case; and

wherein said fixing ring and said case are welded and fixed to each other in a state where said predetermined force is applied to said fixing ring.

4. An electret condenser microphone according to claim 3, wherein said diaphragm and said back electrode plate are disposed with said predetermined gap therebetween by way of a spacer; and

wherein said predetermined force applied to said insulating bushing from said opened end of said case is set to a value at which said insulating bushing deforms such that a part fitted between said inner peripheral face of said case and said end portion of said back electrode plate abuts against said spacer.

(5) A method of assembling an electret condenser

microphone in which, into a tubular case having one end provided with a bottom portion to be used as a front faceplate and the other end opened, a diaphragm and a back electrode plate are successively inserted from said opened end; said method comprising the steps of:

press-fitting an insulating bushing into said case from said opened end; and

applying a predetermined force to said insulating bushing from said opened end of said case so as to deform said insulating bushing such that said insulating bushing fits between an inner peripheral face of said case and an end portion of said back electrode plate, thereby fixing said back electrode plate to said case.

6. A method of assembling an electret condenser microphone according to claim 5, further comprising the steps of:

disposing a spacer between said diaphragm and said back electrode plate; and

setting said predetermined force applied to said insulating bushing from said opened end of said case to a value at which said insulating bushing deforms such that a part fitted between said inner peripheral face of said case and said end portion of said back electrode plate abuts against said spacer.

7. A method of assembling an electret condenser microphone according to claim 5, further comprising the steps

of:

successively inserting a printed circuit board mounted with an impedance converter for converting a change in electrostatic capacity between said diaphragm and said back electrode into an electric impedance, and a fixing ring into said case from said opened end in a state where said insulating bushing is press-fitted into said case; and

welding and fixing said fixing ring and said case to each other in a state where said predetermined force is applied to said fixing ring.

8. A method of assembling an electret condenser microphone according to claim 7, further comprising the steps of:

disposing a spacer between said diaphragm and said back electrode plate; and

setting said predetermined force applied to said insulating bushing from said opened end of said case to a value at which said insulating bushing deforms such that a part fitted between said inner peripheral face of said case and said end portion of said back electrode plate abuts against said spacer.